G2 Injector Diesel Diagnostic Suite Quick Reference Guide

For International and Ford PowerStroke Diesel Engines

IMPORTANT! *Please make sure to carefully read these instructions before you begin to use the tester.*

G2 Injector Test Procedure
for International and Ford Engines

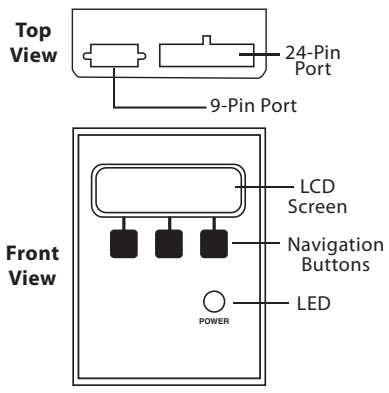
Without the PC Application

1. Connect G2 to the vehicle.
2. Start the vehicle.
3. When prompted, select the vehicle's engine.
4. Select the type of sampling (both display numbers in actual time):
   Single Capture—Takes one sampling
   Continuous Capture—Continues to take/display samples until you stop the test.
5. Review the results for each cylinder by pressing **SCROLL**.

With the PC Application

1. Connect G2 to the vehicle.
2. Connect G2 to your computer.
3. Start the vehicle and when prompted on the G2, select the vehicle's engine .
4. Open the G2 Injector Diesel Diagnostic Suite on your computer.
5. When prompted on your computer, select the vehicle's manufacturer, engine type, and available adapter.
6. At the Main menu, select **G2 Injector Tester**.
7. At the G2 Injector Test screen, select **Acquire Data** to begin displaying the results on the computer in real time.

Using the G2 Controls



LCD Screen—displays instructions and test results

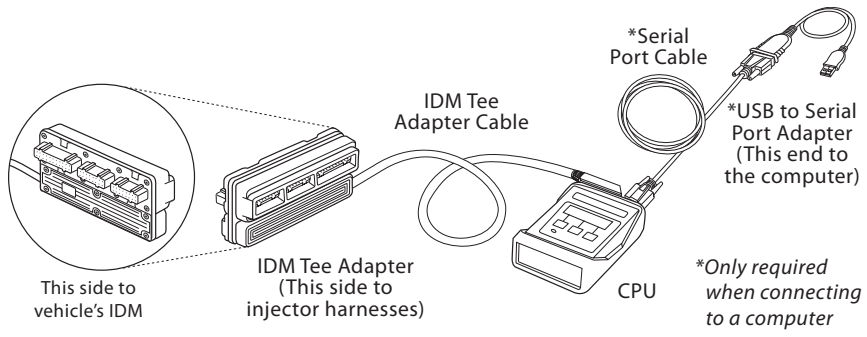
Navigation Buttons—the function of the buttons are displayed on the screen such as selecting a function (SEL) or a vehicle's engine scrolling through results, or moving to the next step of the test (GO).

LED —lights when the tester is powered on.

9-Pin Port—connect the Serial Port Cable to this port

24-Pin Port—connect the IDM Tee Adapter Cable to this port.

G2 Injector Test Hookup Procedure
for International and Ford Engines


*Serial Port Cable
IDM Tee Adapter Cable
*USB to Serial Port Adapter (This end to the computer)
This side to vehicle's IDM
IDM Tee Adapter (This side to injector harnesses)
CPU
*Only required when connecting to a computer

To connect to the vehicle:

In the engine compartment:

1. Disconnect the vehicle harness (X1, X2, and X3) from the IDM/PCM or FICM depending on vehicle.
2. Connect the *Tee* adapter to the IDM/PCM or FICM depending on vehicle and secure it using a tie wrap or other device.

   ⚠ WARNING
   Failure to properly connect and secure the Tee Adapter can result in connector damage, injector misfire, stalling, etc.

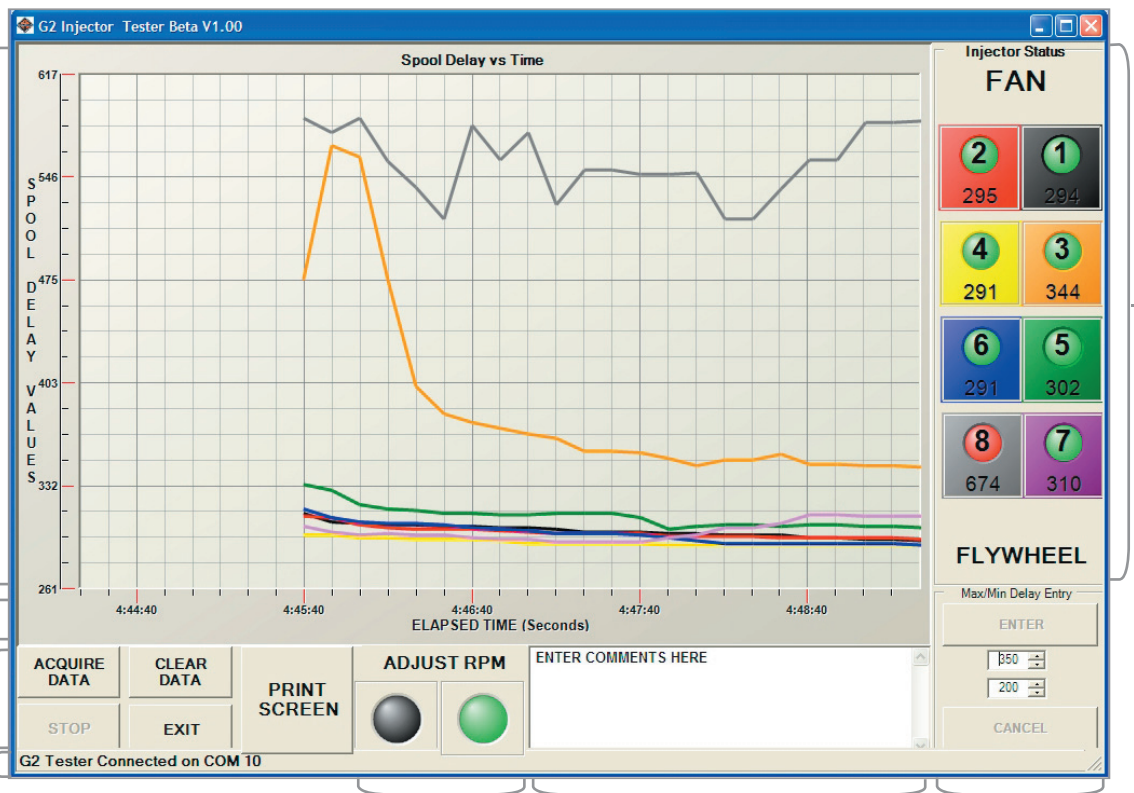
3. Re-connect X1, X2, and X3 to the *Tee* adapter.
4. Plug the *Tee* adapter cable connector in to the CPU.
5. Securely attach the CPU to an engine compartment component for engine running conditions.

To connect to the computer:

1. Connect to the vehicle as described in the steps to the left.
2. If you are connecting to a USB port on your computer, attach the USB to Serial Port Adapter to the serial cable.
3. Connect the Serial Cable to the CPU.

See other side for information on the Oil Pressure Monitor, Cylinder Kill and fuel System DTC Monitor Procedures.

G2 Injector Tester Application Overview



SPOOL DELAY VALUES
Range of Spool Delay Values for the current test.

ELAPSED TIME
Displayed in real time, shows the elapsed time since the test began.

TOOL BAR
Note: The button is grayed out if the function is not available.

ACQUIRE DATA—Select to begin the test.

STOP—Select to stop test.

CLEAR DATA—Select to clear the current values. Available after stopping a test.

PRINT SCREEN—Select to printout and save a picture of the current window. If a printer is not available, a .jpg file is still saved on the computer's hard drive.

EXIT—Select to exit and close the program. Available after stopping the test.

STATUS BAR
Displays the COM port the tester is connected to.

ADJUST RPM

Right Circle—When green, the engine is operating within acceptable conditions.

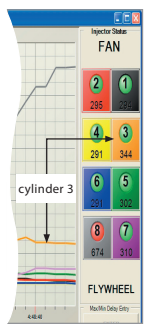
Left Circle—When red, the engine operating conditions will not allow the tester to take measurements. Manually adjust the vehicle's RPM until the circle turns black and the right circle turns green.

ENTER COMMENTS HERE
Using the computer's keyboard, enter desired comments, such as the customer's name, vehicle information, etc. before printing and/or saving a screen shot.

MAX/MIN DELAY ENTRY
Displays the delay values for the engine selected. To manually set Max/Min Delay, use the up/down arrows to change the values and then select ENTER.

INJECTOR STATUS
Displays the engine cylinder layout and the individual test results for *each* injector including the spool delay values. Green indicates a PASS, red indicates a FAIL, for that particular injector.

The cylinder is identified on the graph with the same color as the square surrounding the cylinder number.



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Oil Pressure Monitor, Cylinder Kill, and Fuel System DTC Monitor Procedures

Hookup Procedure *for Ford Engines*

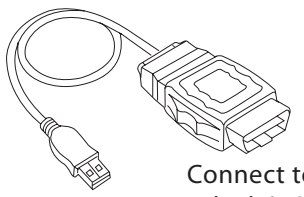
To connect to the vehicle:

1. Remove the cover from the vehicle's OBD II connector (if applicable).
2. Connect the Vehicle Interface Cable to the vehicle's OBD II connector.

To connect to the computer:

1. Connect to the vehicle as described in the steps above.
2. Plug the USB connector into the computer's USB port.

Vehicle Interface Cable
(included in kit)



Hookup Procedure *for International Engines*

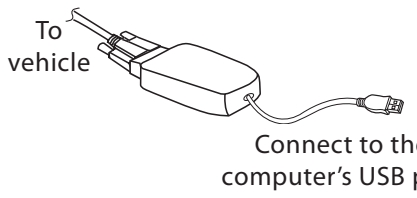
To connect to the vehicle:

1. Connect the vehicle interface cable (VDA) to the vehicle per normal procedures.

To connect to the computer:

1. Connect to the vehicle as described in the steps above.
2. Plug the USB connector into the computer's USB port.

RP-1210 Compliant Data Link Adapter
(user supplied)



G2 is compatible with the these adapters:

• Dearborn Group • IC4 • NAVCoM • NAV-Link • NEXIQ

Test Procedures
for International and Ford Engines

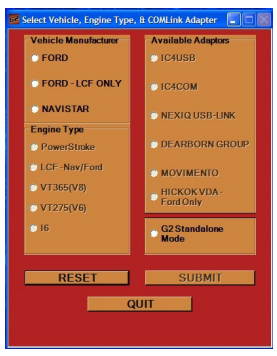
1. Connect your computer to the vehicle per the hookup procedure.
2. Start the vehicle.
3. Open the G2 Injector Diesel Diagnostic Suite on your computer.
4. When prompted, select the vehicle's manufacturer, engine type, and available adapter.
5. At the Main menu, select the desired test.
6. At the G2 Injector Test screen, select **Acquire** or **Begin Test** (depending on test selected) to begin displaying the results on the computer in real time.

Information Selection Screen

This screen is displayed when you start the G2 Injector Diesel Diagnostic Suite.

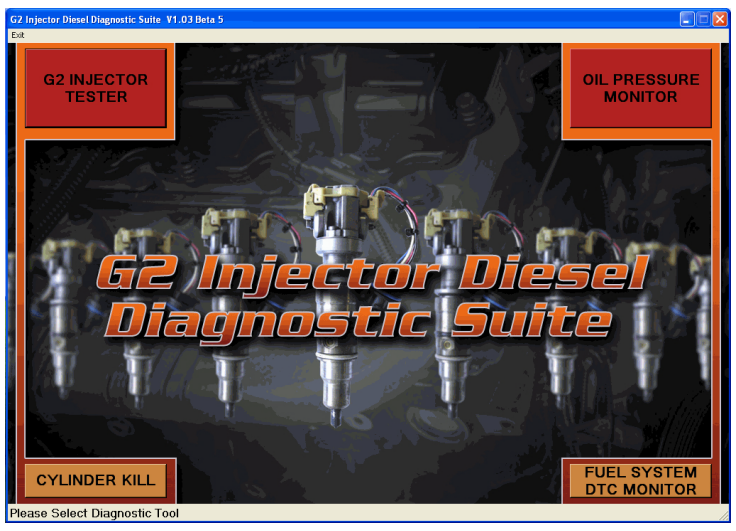
Select the information for the vehicle you are testing and then select **SUBMIT** to proceed to the Main menu.

To clear the information and reselect the vehicle information, select **RESET**.



Main Menu

1. Connect your computer to the vehicle per the hookup procedure.
2. Start the vehicle.
3. Open the G2 Injector Diesel Diagnostic Suite on your computer.
4. When prompted, select the vehicle's manufacturer, engine type, and available adapter.



See other side for information on the G2 Injector Test Procedures.

Cylinder Kill Test

This test automatically kills each cylinder to determine if there are any changes in the fuel rate and engine load to detect a weak cylinder.

Fuel Rate / Engine Torque Rate
Navistar vehicles—Displays the fuel rate deviation for each cylinder.

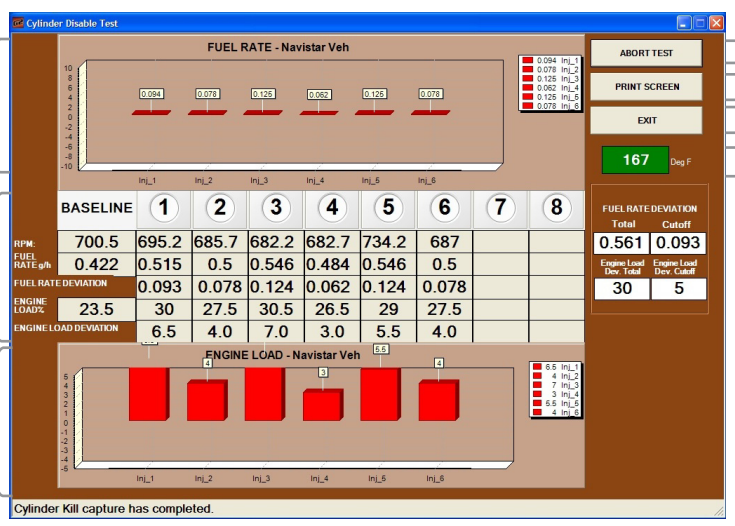
Ford vehicles—Displays the engine torque rate for each cylinder.

Exit
Select to exit and close the program.

Print Screen
Select to save the screen as a .jpg image.

Begin Test / Abort Test
Begin Test—Select to start the test.

Abort Test—Select to stop the test once it begins.



Engine Load
Displays the engine load deviation for each cylinder.

Numerical Data
Displays the various results for each cylinder

Engine Oil Temperature
Displays current engine oil temperature

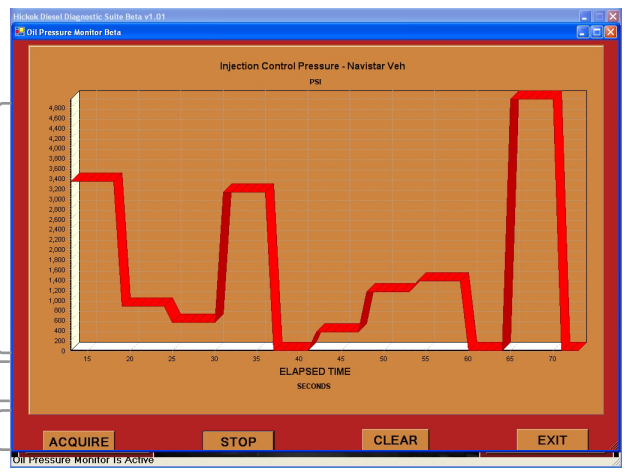
RED —Not at optimum temperature for accurate test results.

GREEN—Optimum temperature for accurate test results reached.

Oil Pressure Monitor

Injector Control Pressure
Range of PSI Values for the current test.

ELAPSED TIME
Displayed in real time, shows the elapsed time since the test began.



TOOL BAR
Note: The button is grayed out if the function is not available.

ACQUIRE DATA—Select to begin the test.

STOP—Select to stop test.

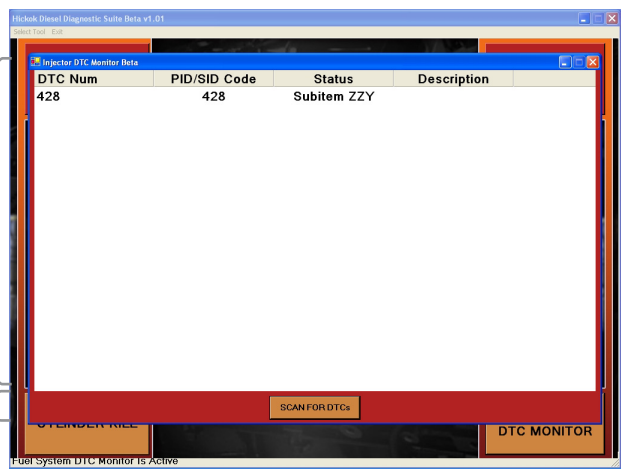
CLEAR —Select to clear the current values. Available after stopping a test.

EXIT—Select to exit and close the program. Available after stopping the test.

Fuel System DTC Monitor

DTC Monitor Window
Displays information regarding the found system related DTCs

SCAN FOR DTCs
Select to check for and display any fuel system related DTCs.



For Technical Support: 1-800-342-5080

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